

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,904	03/05/2002	Michael Stanford	P9092 6618	
GROSSMAN, TUCKER, PERREAULT & PFLEGER, PLLC C/O PORTFOLIO IP P. O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER	
			LE, KAREN L	
			ART UNIT	PAPER NUMBER
			2614	
•				
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	THS	02/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
Office Action Comments	10/087,904	STANFORD, MICHAEL			
Office Action Summary	Examiner	Art Unit			
	Karen L. Le	2614			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be ting 17 ill apply and will expire SIX (6) MONTHS from 18 cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 15 No	ovember 2006.	•			
2a)⊠ This action is FINAL . 2b)☐ This					
3) Since this application is in condition for allowan	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>1,2,4-7,19-23 and 25-48</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6) Claim(s) <u>1,2,4-7,19-23 and 25-48</u> is/are rejecte	d.				
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers.					
9) The specification is objected to by the Examiner		*			
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
	•				
Attachment(s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application			

DETAILED ACTION

1. Applicant's amendment filed on November 15, 2006 has been entered. Claims 1, 4, 16, 19, 22 and 25 have been amended. Claims 3, 18 and 24 have been cancelled. No claims have been added. Claims 1-2, 4-17, 19-23 and 25-48 are still pending in this application, with claims 1, 16, 22, 28, 41 and 45 being independent.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-2, 4-13, 16-17, 19-23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al. (U. S. 5,825,869) in view of Fisher et al (US 6,553,114).

Regarding claims 1, 16 and 22, Brooks teaches a method of automatic call distribution in a call queue, comprising:

associating at least one skill requirement with a call (Col. 4, lines 57-60); associating at least one skill level, among a range of skill levels, with each agent among a group of agents (Col. 4, lines 60-67), the skill level corresponding to the at least one skill requirement of the call (Col. 5, lines 55-56); computing a match rating for each

Art Unit: 2614

agent cumulatively multiplying a predetermined value by each skill level for which the call has a corresponding skill requirement; and routing the call to an available agent based at least in part on the computed match rating for the available agent (Col. 3, lines 40-45 and 46-57).

Brooks does not teach cumulatively multiplying a predetermined value by each skill level for which the call has a corresponding skill requirement. However, Fisher teaches cumulatively multiplying a predetermined value by each skill level for which the call has a corresponding skill requirement (Col. 7, lines 44-61). Fisher teaches determining whether the average value of assigned skill level for all of agent's skills is greater than the assigned skill level for the presently selected skill multiplied by a predetermined value. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Fisher's feature into Brook's system in order to cumulatively multiply a predetermined value by each skill level for which the call has a corresponding skill requirement. Fisher merely addresses an old and well-known aspect of ACD systems.

Regarding claims 2, 17 and 23, Brooks further teaches the call is routed based at least in part on a highest match rating criterion (Col. 3, lines 65-67).

Regarding claims 4, 19 and 25, Brooks further teaches the predetermined value includes a default rating (Col. 14, lines 1-4)

Art Unit: 2614

Regarding claims 5-8, 20-21 and 26-27, it is well-known in the art that a skill level is a number between 0 and 1 wherein a skill lever of 0 for an agent indicates that the agent lacks a skill associated with the skill level and placing the call on hold if a skill level for each agent among the agents is 0, placing the call on hold if an agent is not available. It is just simply a set up of number and data in a certain order.

Regarding claims 9-10, Brooks further teaches a call in the call queue has an associated call priority and wait time, further comprising computing an urgency factor for the call in the call queue, and routing the call to an available agent based at least in part on the urgency factor. Computing the urgency factor includes multiplying the call priority by the wait time (Col. 2, lines 4-16).

Regarding claim 11, Brooks further teaches a call priority depends at least in part on caller ID information associated with the call (Col. 5, lines 40-54).

Regarding claims 12-13, it is old and well known in the art that the call is routed to an available agent based at least in part on a fairness criterion and wherein the fairness criterion includes <u>one</u> of idle time of the agent, a number of calls previously fielded by the agent, and duty cycle of the agent. It would have been obvious to one of ordinary skill in the art at the time the invention was made to route a call to an available agent based on a certain criterion.

Art Unit: 2614

4. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al. (U. S. 5,825,869) in view of Fisher et al (US 6,553,114) and further in view of Stathem (US 2002/0076030).

Regarding claims 14 and 15, Brooks does not teach the call is routed to an available agent based at least in part on an override criterion wherein the override criterion includes one of an account number associated with the caller, caller ID information, and an exception. However, Statham teaches the dial number identification service override (paragraph 0071). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Statham's feature into Brooks' system in order to route a call to an available agent based in part on an override criterion. Override criterion is an old and well-known feature in telecommunication.

5. Claims 28-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al. (U. S. 5,825,869) in view of Uckun (US 2003/0002653).

Regarding claims 28, 41 and 45, Brooks does not teach in a graphical user interface for automatic call distribution, a method comprising:

displaying a time axis associated with a call queue, the axis representing a predetermined interval of time associated with calls in the call queue; displaying call indicators on the time axis, each of the call indicators corresponding to a respective call and being displayed at a position on the time axis that corresponds to a time at which the call was added to the call queue; selectively displaying, for each call indicator,

status information for the corresponding call, the displaying being triggered by the selection of the respective call indicator, and updating the time axis and call indicators to reflect passage of time. However, Uckun teaches displaying a time axis associated with a call queue (Abstract), the x axis represents time period and the Y axis is used to convey to a call center manager of call centers ability to meet its metric. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Uckun's feature into Brooks' system in order to display a time axis associated with a call queue. This is old and well known in telecommunication field.

Page 6

Regarding claims 29-31, 42-44 and 46-48, Brooks does not teach a respective call indicator is selected at least in part by user input, the user input includes the positioning of a cursor on or near the respective call indicator and a respective call indicator is selected at least in part by an automated procedure. However, Uckun teaches a respective call indicator is selected at least in part by user input, the user input includes the positioning of a cursor on or near the respective call indicator and a respective call indicator is selected at least in part by an automated procedure (paragraph 0019).

Regarding claim 32, Brooks does not teach a call indicator is substantially perpendicular to the time axis. However, Uckun teaches a call indicator is substantially perpendicular to the time axis (paragraph 0019).

Art Unit: 2614

Regarding claim 33, Brooks does not teach a call indicator associated with an answered call is displayed in a first color, and a call indicator associated with an unanswered call is displayed in a second color. However, Uckun teaches a call indicator associated with an answered call is displayed in a first color, and a call indicator associated with an unanswered call is displayed in a second color (Paragraph 0021 and 0027).

Regarding claim 34, Brooks does not teach the predetermined interval of time includes a time at which an oldest call in the queue was received. However, Uckun teaches the predetermined interval of time includes a time at which an oldest call in the queue was received (Fig. 3, the most left dot).

Regarding claims 35-37, Uckun further teaches the status information is displayed in a pop-up window, displaying summary information for calls in the queue and the summary information includes at least one of: number of calls in the queue, average waiting time of a call, average holding time of a call, longest time in the queue, and longest time talking (Fig. 3)

Regarding claim 38, it is old and well known in the art that a call indicator flashes when a respective call is on hold longer than a predetermined time. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the old flash feature to detect hold time.

Art Unit: 2614

Regarding claim 39, Uckun further teaches a call indicator for a call has a predetermined representation depending on whether the call is an answered or unanswered call center (See paragraph 11 and 17).

Regarding claim 40 Uckun further teaches a call indicator has an associated call status indicator (Fig. 3).

Response to Arguments

6. Applicant's arguments with respect to claims 1-2, 4-17, 19-23 and 25-48 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 3 7 CFR 1. 13 6(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2614

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1. 136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen L. Le whose telephone number is 571-272-7487. The examiner can normally be reached on Mon and Thurs: 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2614

Karen Le K.L.

February 5, 2007

Jhmue Mrtar AHMAD F. MATAR

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2700